

ALIGNMENT MARK CONFIGURATION

CROSS-REFERENCE TO RELATED APPLICATION

This application is a continuation-in-part application of, and claims the priority
5 benefit of, U.S. application serial no. 09/521,021, filed on March 8, 2000^{ABN} and entitled
"Alignment Mark Configuration".

BACKGROUND OF THE INVENTION

Field of the Invention

10 The present invention relates to an integrated device. More particularly, the
present invention relates to an alignment mark configuration.

Description of the Related Art

Photolithography is a critical step in the fabrication of an integrated device. For
any general type of device fabrication, depending on the complexity of the product, the
15 number of photolithography processes that are required to complete the product vary in
number from about 10 to 18. In order to properly transfer a pattern on a mask to the
wafer, the location of the alignment mark must be identified to accurately register the
pattern on the mask with the previously formed pattern before performing the exposure
process. The issue of discarding the entire wafer due to a mistake such as pattern
20 misalignment in the pattern transferring process is thus prevented.

Proper identification of the alignment mark location mainly relies on the
topography of the wafer surface. A scattering site or diffraction edge of an incident
light is formed during the alignment process. The diffraction light reflected from the
alignment mark is used as a signal, which is received by the overlay detector, to align